

Fact Sheet



For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00300133-2010**

Application Received: **January 22, 2010**

Plant Identification Number: **03-54-003-00133**

Permittee: **U.S. Department of the Treasury, Internal Revenue Service (IRS)**

Mailing Address: **250 Murall Drive, MS#2225, Kearneysville, WV 25430-5200**

Revised NA

Physical Location:	Kearneysville, Berkeley County, West Virginia
UTM Coordinates:	248.928 km Easting • 4365.127 km Northing • Zone 18
Directions:	Take I-81 to WV. At Exit 12 (WV-45/Winchester Avenue/Charlestown) turn onto WV-45 Eastbound (Apple Harvest Drive). Drive for 2.0 miles until WV-45 Eastbound becomes WV-9 Eastbound (Charles Town Road). Drive for 3.7 miles on WV-9 Eastbound (Charles Town Road). Next turn onto Short Road and make immediate Left onto Murall Drive. Drive for 0.2 miles on Murall Drive to arrive at the site.

Facility Description

The U.S. Department of the Treasury, Internal Revenue Service (IRS) operates an Enterprise Computing Center in Kearneysville, WV. This facility is responsible for the processing of tax returns that are submitted electronically. The IRS Enterprise Computing Center operations are located in a Main Building and an Annex Complex. The Main Building is equipped with three (3) 5.25 MMBtu/hr boilers and ten (10) emergency generator sets that were installed in 1999. The Annex Complex is equipped with two (2) 1.62 MMBtu/hr boilers and five (5) emergency generator sets that were installed in 1995. The boilers provide space heating for each building. Each of these boilers operates using No. 2 Fuel Oil at a maximum design rate of 37.5 gallons per hour for the Main Building and 11.6 gallons per hour for the Annex Complex. This facility has a Standard Industrial Classification (SIC) Code of 9311 and North American Industry Classification System (NAICS) Code of 92113. The facility has the potential to operate seven (7) days per week, twenty-four (24) hours per day.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2009 Actual Emissions
Carbon Monoxide (CO)	35.04	2.21
Nitrogen Oxides (NO _x)	151.8	9.38
Particulate Matter (PM _{2.5})	4.574	0.31
Particulate Matter (PM ₁₀)	4.723	0.34
Total Particulate Matter (TSP)	5.270	0.48
Sulfur Dioxide (SO ₂)	26.31	4.49
Volatile Organic Compounds (VOC)	4.440	0.27
Lead (Pb)	0.0007489	0.0002
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2009 Actual Emissions
Total HAPs	<0.1	0.009

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 151.8 tons per year of Nitrogen Oxides (NO_x). Due to this facility's potential to emit over 100 tons per year of criteria pollutant, the U. S. Department of the Treasury, Internal Revenue Service (IRS), Enterprise Computing Center is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	To Prevent and Control Particulate Air Pollution From Combustion of Fuel In Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61 Subpart M	Asbestos inspection and removal
	40 C.F.R. Part 82 Subpart F	Ozone depleting substances

State Only: 45CSR4 No objectionable odors.
 45CSR42 Greenhouse Gas Emissions Inventory
 Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2787	February 13, 2009	None
Main Building		
Installation of 10- emergency back-up generator sets and 3-boilers.		
R13-2788	February 13, 2009	None
Annex Complex		
Installation of 5-emergency back-up generator sets and 2-boilers		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

1. The three (3) 5.25 MMBtu/hr boilers in the Main Building and the two (2) 1.62 MMBtu/hr boilers in the Annex Complex each have a maximum design heat input of less than 10 MMBTU/hr. Since 45CSR§2-11 exempts any fuel-burning unit with heat input under 10 MMBTU/hr from the requirements of 45CSR§2-4, 5, 6, 8, and 9, the boilers are not subject to:
 1. PM weight emissions standards,
 2. Control of fugitive particulate matter requirements,
 3. Testing, monitoring, recordkeeping, and reporting requirements, or
 4. Start-up, shutdowns, and malfunctions

However, each boiler is still subject to the 10% opacity standard of 45CSR§2-3.1.

2. 45CSR10 does not apply to the emergency generators since they are not fuel burning units subject to 45CSR§10-3, they are not defined as a manufacturing process operation subject to 45CSR§10-4, and they do not combust a refinery or process gas streams subject to 45CSR§10-5.
3. 45CSR§10-10.1 exempts any fuel burning unit with a design heat input of less than 10 MMBtu/hr from the requirements of 45CSR§§10-3, and 6 through 8. Since the three (3) 5.25 MMBtu/hr boilers in the Main Building and the two (2) 1.62 MMBtu/hr boilers in the Annex Complex each have a maximum heat input which is less than 10 MMBtu/hr, they are exempt from sulfur dioxide weight emission standards for fuel burning units, registration, permits, testing, monitoring, and recordkeeping requirements of 45CSR10. Also, these boilers are not defined as a manufacturing process source operation subject to 45CSR§10-4, and they do not combust refinery gas or process gas streams subject to 45CSR§10-5; therefore they are not subject to any other requirements under 45CSR10.
4. The facility shall demonstrate compliance with the hourly and annual emission limitations in Sections 4.1.1.a and 4.1.4.a for each boiler by recording their hourly operations and the fuel oil consumed by each boiler, Section 4.4.3. The sulfur content of the fuel oil is to be equal to or less than 0.2%.

By the permittee being limited to the amount of fuel consumed on an annual basis (Sections 4.1.3 and 4.1.6.) and being required to maintain each boilers' hours of operation, plus the amount fuel consumed by each boiler (Section 4.4.3.), the permittee should easily comply with the annual emissions limits in Sections 4.1.1.a and 4.1.4.a by using the recorded information with the AP-42 emission factors (Section 1.3, Tables 1.3-1 (Distillate Oil #2 Heating Oil for Boilers <100 MMBtu/hr), 1.3-7, 1.3-9 and 1.3-10).

5. The facility shall demonstrate compliance with the hourly and annual emission limitations of Sections 4.1.2.a and 4.1.5.a by operating each emergency generator less than or equal to 500 hours per year, by operating each emergency generator in accordance with the manufacturer's written instructions, by not exceeding 1,917 brake horsepower output for each generator set and by limiting the sulfur content of the fuel oil to 0.2%. For each engine, the facility shall demonstrate compliance with hours of operation per Section 4.2.1.

According to the NSR permit applications, the calculations for the annual emission limitations in Sections 4.1.2.a and 4.1.5.a were based on the emergency generator sets operating 300 hours instead of 500 hours of operations limitation in Sections 4.1.2.c and 4.1.5.c. Thus, the annual emission limitations are more stringent than allowed by the 500 hours.

Sections 4.1.2.b and 4.1.5.b state the maximum power output of each engine shall not be greater than 1,917 bhp. The maximum horsepower of 1,917 HP is based on an engine performance test that was done on the Annex Complex emergency generators that were installed in 1995. The Main Building emergency generator sets that were installed in 1999 in the NSR permit (R13-2787) application were assumed to have the same maximum power output as the Annex Complex emergency generators since they are same make and model. According to the Title V application, the available horsepower for each Annex Complex generator and each Main Building generator is 2413 HP and 2680 HP, respectively, which causes there be a difference between the NSR permits emission limits and the PTE provided in the Title V in the application.

Another difference between the potential to emit calculations in the application and the annual emission limitations in Sections 4.1.2.a and 4.1.5.a is that the emergency generators calculations in the application were determined using 2680 HP and 2413 HP operating for 300 hours per year, while the annual emission limitations in Sections 4.1.2.a and 4.1.5.a were determined using 1917 HP engines operating 300 hours per year.

Since the permittee is required to maintain the emergency generator hours of operation (Section 4.2.1.) and the available horsepower per emergency generator is known, the permittee should comply, without difficulty, with the annual emissions limits in Sections 4.1.2.a and 4.1.5.a by using the recorded and known information with the AP-42 emission factors (Section 3.4, Tables 3.4-1 (Diesel Fuel), 3.4-3 and 3.4-4).

The facility shall maintain records on who supplies the fuel oil, the sulfur content of fuel oil, the amount of fuel oil delivered, and when the fuel oil was delivered per Section 4.4.1.

6. Since there are no air pollution control equipment associated with the emission units at this facility, Sections 4.1.5, 4.4.2, and 4.4.3 of NSR permits, R13-2787 and R13-2788, were not included in the Title V permit.
7. The applicable 45CSR13 permits contained an inconsistency of the frequency when visible emissions should be monitored, yearly or monthly, was revised as follows. “Year” in the first sentence of the third paragraph in Section 4.2.2 of the NSR permits, R13-2787 and R13-2788, was replaced with “month” to be consistent with the first sentence in the fourth paragraph of Section 4.2.2 of the Title V permit, which requires monthly visible emission checks.
8. 45CSR42 – Greenhouse Gas Emissions Inventory Program. This rule applies to all facilities whose greenhouse gas emissions exceed the *de minimis* amount on an annual basis given at 45CSR§42-3.1, and which are required to report emissions of regulated air pollutants pursuant to W.Va. Code § 22-5-4 (a) (14). The permittee is required to report emissions pursuant to this section of W. Va. Code since it is cited Section 3.1.6. The permittee’s facility is subject to reporting of greenhouse gases emitted above the *de minimis* amount in the years specified by the Secretary. Refer to Sections 3.1.9 and 3.5.10.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR10	To Prevent and Control Air Pollution From Emissions of Sulfur Oxides. Each of the boilers have a maximum design heat input of less than 10 MMBtu/hr and are not subject to 45CSR10 per 45CSR§10-10.1.
40 C.F.R. Part 60 Subpart Dc	Standards of Performance for fossil-fuel-fired steam generators for which construction is commenced after June 9, 1989 does not apply because each of the boilers are less than the applicability size of 10 MMBtu/hr.
40 C.F.R. Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 does not apply because the fuel oil that IRS acquires has vapor pressure less than 15.0 kPa (\approx 2.175566 psi), 40 C.F.R. § 60.110b (b). Since the tanks at this facility do not have any requirements, they are not listed in the permit.
40 C.F.R. Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The ten (10) 2,628 hp and five (5) 2,167 hp compression ignition, internal combustion engines were manufactured before July 11, 2005. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart IIII.
40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The ten (10) 2,628 hp and five (5) 2,167 hp are not spark ignition internal combustion engines. These engines were also manufactured before June 12, 2006. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart JJJJ.
40 C.F.R. Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The facility's fifteen (15) emergency generator sets are not subject to 40 C.F.R. Part 63 Subpart ZZZZ since construction commenced before June 12, 2006 and the facility is not a major source of HAPs.
40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM)	CAM applies to any pollutant specific emissions units (PSEU) that satisfy all of the applicability criteria requirements of 40 C.F.R. § 64.2 (a), i.e., that: (1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the "major" threshold limits to be classified as a major source; (2) are subject to an emission limitation or standard and; (3) have a control device to achieve compliance with such emission limitation or standard. Since this facility does not have any control devices, it is not subject to the CAM rule.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: August 4, 2010
Ending Date: September 3, 2010

All written comments should be addressed to the following individual and office:

Wayne Green
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Wayne Green
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.